

11/18/71
CST
exchanging information between successive slots of the plurality of T-carriers and a respective predetermined memory location within a memory device;

exchanging information between successive slots of the T-carrier interface device and at least some of the predetermined locations in memory of each of the plurality of T-carrier channels; and

compressing at least some of the information exchanged between the first plurality of T-carriers and respective predetermined memory locations within the memory device.

✓
Delete, without prejudice, claim 47.

REMARKS

1. Reconsideration and further prosecution of the above-identified application are respectfully requested in view of the amendments and discussion that follows. Claims 1-56 are pending in this application. The specification has been objected to for certain informalities. Claims 8, 9, 28, 29, 41 and 42 have been objected to for certain informalities. Claims 8 and 9 have been rejected under 35 U.S.C. §112, second paragraph as being indefinite. Claims 1-3, 5-7, 10-16, 22, 23, 25-27, 30-40 and 43-45 have been rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,841,771 to Irwin et al. Claims 4, 8, 9, 24, 28, 29, 41 and 42 have been rejected under 35 U.S.C. §103(a) as being obvious over Irwin. Claims 17-21 and 46-54 have been objected to as being dependent upon a rejected base claim, but allowable if rewritten in independent form. After a careful review of the claims (as amended), it has been concluded that the rejections are in error and the

rejections are, therefore, traversed.

2. The specification has been objected to. In particular, the Examiner asserts that numerical parameters should be in word form to avoid confusion. In response, pages 8-11 have been amended to change the numbers 24 and 48 to their word form.

3. Claims 8, 9, 28, 29, 41 and 42 have been objected to for certain informalities. In response, claims 8, 9, 28, 29, 41 and 42 have been amended to correct the noted informalities.

4. Claims 8 and 9 have been rejected under 35 U.S.C. §112, second paragraph as being indefinite. In response, claims 8 and 9 have been amended to clarify the scope of the claimed invention.


5. Claims 1-3, 5-7, 10-16, 22, 23, 25-27, 30-40 and 43-45 have been rejected as being anticipated by Irwin et al. In response, the limitation of allowable claim 17 has been incorporated into independent claims 1, 16 and 35. Claim 17 has been deleted. Since the limitation of allowable claim 17 has been incorporated into the independent claims, all of the remaining claims should now be allowable.

6. Claims 4, 8, 9, 24, 28, 29, 41 and 42 have been rejected as being obvious over Irwin. However, as demonstrated above, all claims should now be allowable.

7. Allowance of claims 1-56, as now presented, is believed to be in order and such action is earnestly solicited. Should the Examiner be of the opinion that a telephone conference would expedite prosecution of the subject application, he is respectfully requested to telephone applicant's undersigned attorney.

Respectfully submitted,

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Marked-Up Specification

On page 6, lines 19-27, change the paragraph to read as follows:

For convenience, data traveling from left to right in FIGs. 1, 2 and 4 will normally be considered as traveling in the forward direction. Data traveling from right to left will usually be considered as traveling in the reverse direction. Further, "servicing" a channel of a T-carrier will include[d] not only receiving data from the channel, but also inserting data into the channel for transmission in the opposite direction.

On page 8, lines 3-17, change the paragraphs to read as follows:

For example, where the first T-carrier 18 is a T1 carrier, odd frames may be written into a first [24] twenty-four successive memory locations of memory space. Even frames may be written into the next [24] twenty-four successive memory locations in memory space to provide a total memory requirement of [48] forty-eight locations for the first T-carrier. Further, the odd and even memory spaces may be interleaved.

Similarly, the second T-carrier 20 may also be a T1 carrier, which writes odd frames into [24] twenty-four successive memory locations of another location of the memory space and even frames into [24] twenty-four successive memory

locations in the memory space. As with the first T-carrier, the odd and even memory spaces may be interleaved.

On page 10, lines 3-9, change the paragraph to read as follows:

To facilitate the cross-connect process, data may be exchanged between memory 30 and the third T-carrier 22 sequentially. For example, data may be exchanged on a first channel, then a second channel, a third, and so on. As with the first and second T-carriers, the third T-carrier may use a modulo [48] forty-eight counter to keep track of channel number (and address).



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Marked-Up Claims

1. A method of exchanging information between at least some slots of a first T-carrier and some other non-coincidental slots of a second T-carrier, such method comprising the steps of:

exchanging information between successive slots of the first T-carrier and respective predetermined memory locations within a memory device; [and]

exchanging information between successive slots of the second T-carrier and at least some of the predetermined locations in memory of the first T-carrier based upon a channel-exchange list relating at least some channels of the first T-carrier to at least some other channels of the second T-carrier; and

compressing the information from successive slots of the first T-carrier.

Amend claim 6 to read as follows:

6. The method of exchanging information as in claim [1]5 wherein the step of exchanging information between successive slots of the second T-carrier and at least some of the predetermined locations in memory of the first T-carrier based upon a channel-exchange list further comprises incrementing a second counter coincident with a slot progression of the second T-carrier.

Amend claim 8 to read as follows:

8. The method of exchanging information as in claim 7 further comprising determining the predetermined memory locations of the first T-carrier by adding an output of the second counter to a base memory address of the lookup table.

Amend claim 9 to read as follows:

9. The method of exchanging information as in claim 8 further comprising retrieving a predetermined memory location of the predetermined memory locations of the first T-carrier from a lookup table memory address determined by adding the output of the second counter and the base memory address of the lookup table.

Amend claim 12 to read as follows:

12. The method of exchanging information as in claim 11 further comprising defining the second T-carrier as a [second] plurality of T-carriers.

Amend claim 16 to read as follows:

16. Apparatus for exchanging information between at least some slots of a first T-carrier and some other non-coincidental slots of a second T-carrier, such apparatus comprising:

means for exchanging information between successive slots of the first T-carrier and respective predetermined memory locations within a memory device; [and]

means for exchanging information between successive slots of the second T-carrier and at least some of the predetermined locations in memory of the first T-carrier based upon a channel-exchange list relating at least some channels of the first T-carrier to at least some other channels of the second T-carrier;
and

means for compressing the information from successive slots of the first T-carrier.

Delete, without prejudice, claim 17.

Amend claim 18 to read as follows:

18. The method of exchanging information as in claim 17 wherein the step of compressing the information from the successive slots of the first T-carrier further comprises [as] storing both compressed and uncompressed versions in the predetermined memory locations of the memory device.

Amend claim 28 to read as follows:

28. The apparatus for exchanging information as in claim 24 further comprising means for determining the predetermined memory locations of the first T-carrier by adding an output of the second counter to a base memory address of the lookup table.

Amend claim 29 to read as follows:

29. The apparatus for exchanging information as in claim 28 further comprising means for retrieving a predetermined memory location of the predetermined memory locations of the first T-carrier from a lookup table memory address determined by adding the output of the second counter and the base memory address of the lookup table.

Amend claim 35 to read as follows:

35. Apparatus for exchanging information between at least some slots of a first T-carrier and some other non-coincidental slots of a second T-carrier, such apparatus comprising:

a first address controller adapted to exchange information between successive slots of the first T-carrier and respective predetermined memory locations within a memory device; [and]

a second address controller adapted to exchange information between successive slots of the second T-carrier and at least some of the predetermined locations in memory of the first T-carrier based upon a channel-exchange list relating at least some channels of the first T-carrier to at least some other channels of the second T-carrier; and

an encoder adapted to compress the information from successive slots of the first T-carrier.

Amend claim 41 to read as follows:

41. The apparatus for exchanging information as in claim 39 further comprising an adder adapted to determine the

predetermined memory locations of the first T-carrier by adding an output of the second counter to a base memory address of the lookup table.

Amend claim 42 to read as follows:

42. The apparatus for exchanging information as in claim 41 further comprising a memory controller adapted to retrieve a predetermined memory location of the predetermined memory locations of the first T-carrier from a lookup table memory address determined by adding the output of the second counter and the base memory address of the lookup table.

Amend claim 43 to read as follows:

43. The apparatus for exchanging information as in claim 3[4]³⁵5 wherein the first T-carrier further comprises a plurality of T-carriers.

Amend claim 44 to read as follows:

44. The apparatus for exchanging information as in claim 3[4]³⁵5 further comprising a multiplexer adapted to multiplex information between the predetermined locations of the first T-carriers and the second T-carrier.

Amend claim 45 to read as follows:

45. A method of exchanging information between a first plurality of T-carriers and a second T-carrier coupled to a T-carrier interface device, such method comprising the steps of:

exchanging information between successive slots of the plurality of T-carriers and a respective predetermined memory location within a memory device; [and]

exchanging information between successive slots of the T-carrier interface device and at least some of the predetermined locations in memory of each of the plurality of T-carrier channels; and

compressing at least some of the information exchanged between the first plurality of T-carriers and respective predetermined memory locations within the memory device.